REMARKS

Claims 19-31 are pending in the application.

In the specification, a new paragraph has been added at page 1, line 6 claiming the benefit of priority to an earlier application (Application No. 09/240,639, now U.S. Patent 6,350,447). The paragraphs beginning at page 96, line 12; page 98, line 17; page 101, line 7; and page 102, line 27 have been amended to insert SEQ ID NO: tags for sequences disclosed in the specification and Sequence Listing. The paragraph beginning on page 99, line 13, was amended to delete embedded hyperlinks. The paragraph beginning on page 100, line 13 was amended to delete embedded hyperlinks, correct a spelling error, and insert SEQ ID NO: tags for sequences disclosed in the specification and Sequence Listing. The paragraph beginning at line 1 of the Abstract was amended to delete the word novel.

Applicants also submit a substitute Sequence Listing in accordance with 37 C.F.R. §1.825 in which three sequences (SEQ ID NO: 30, 31 and 32) are added; however the sequences were disclosed on page 101, line 21 (SEQ ID NO: 30), page 103, line 7 (SEQ ID NO: 31), and page 103, line 8 (SEQ ID NO: 32) of the instant specification, thus no new matter is added.

The Examiner has acknowledged that claim 19 contains allowable subject matter. The Examiner rejected claims 20 and 22-31 under 35 U.S.C. §112. Applicants have amended claims 20-21, 23-25 and 29 as follows and canceled claim 22. Claims 20 and 29 have been amended to identify the nucleotide sequence encoding SEQ ID NO: 6 and find support in the specification at least at page 23, lines 19-33. Claim 21 has been amended to remove the fragment language and is supported in the specification at least at page 38, lines 4-5. Claim 23 has been amended to identify the minimum sequence identity and finds support at least at page 25, lines 18-25 of the specification. Claim 24 has been amended to define the conditions for highly stringent hybridization and finds support at least at page 11, lines 20-25. Claim 25 had been amended to no longer depend from claim 20 and Applicants submit that support can be found at least at page 23, lines 29-33. Therefore, no new matter has been added. In light of the amended claims, Applicants respectfully request that the 35 U.S.C. §112 rejections be withdrawn.

Chadwick, et al. U.S. Application No. 09/905,732

CONCLUSION

On the basis of the foregoing amendments and remarks, Applicants respectfully submit that the pending claims are in condition for allowance, and a Notice of Allowance is respectfully requested as soon as possible. If there are any questions regarding these amendments and remarks, or if further discussion would expedite allowance of the claims, the Examiner is encouraged to contact the undersigned at the telephone number provided below.

Respectfully submitted,

Date: April 10, 2003

Renée S. Polizotto, Ph.D.

Agent for Applicants Registration No.: 53,474

NUVELO (formerly HYSEQ, INC.)

675 Almanor Avenue Sunnyvale, CA 94085

(408) 215-4522

(408) 524-8145 (Telefacsimile)